AMENDMENTS TO THE CLAIMS

The following listing of the claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A transgenic ~~rodent~~ mouse having somatic ~~and/or~~ and germ cells comprising a nucleic acid which comprises a promoter region that directs protein expression in said transgenic ~~rodent~~ mouse cells that is operably linked to a sequence encoding SEQ ID NO: 4 or a mouse homolog of SEQ ID NO: 4 containing a glycine [[171]] - 170 to valine substitution, and wherein said transgenic ~~rodent~~ mouse has increased bone density.

2. (Currently Amended) A transgenic ~~rodent~~ mouse having somatic ~~and/or~~ and germ cells comprising a nucleic acid which comprises SEQ ID NO: 2 or a mouse homolog which encodes a glycine [[171]] 170 to valine substitution, and wherein the nucleic acid further comprises an operably linked promoter region that directs protein expression in ~~rodent~~ mouse bone cells, and wherein bone mass is modulated relative to non-transgenic mice in more than one parameter selected from among bone density, bone strength, trabecular number, bone size, and bone tissue connectivity.

3. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the nucleic acid comprises SEQ ID NO: 2.

4. (Currently Amended) A transgenic ~~rodent~~ mouse for the study of bone density modulation having somatic ~~and/or~~ and germ cells comprising a nucleic acid which comprises a promoter region that directs protein expression in said ~~rodent~~ mouse operably linked to a sequence encoding SEQ ID NO: 4 or a mouse homolog of SEQ ID NO: 4 containing a glycine [[171]] 170 to valine substitution, wherein bone mass is modulated relative to non-transgenic ~~rodent~~ mice ~~of the same species~~ in more than one parameter selected from among bone density, bone strength, trabecular number, bone size, and bone tissue connectivity.

5. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the promoter region is a bone specific promoter region.

6. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 4, wherein the promoter region is a bone specific promoter region.

7. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the promoter region is a CMVβActin promoter region.

8. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the promoter region is a type I collagen promoter region.

9. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the transgenic ~~rodent~~ mouse expresses a human HBM protein.

10. (Canceled)

11. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein bone mass is modulated relative to a wild-type ~~rodent~~ mouse ~~of the same species~~ in more than one parameter selected from among bone density, bone strength, trabecular number, bone size, and bone tissue connectivity.

12. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein a human HBM protein is expressed, and wherein the transgenic ~~rodent~~ mouse is fertile and passes to its offspring the nucleic acid encoding SEQ ID NO: 4 or a mouse homolog of SEQ ID NO: 4 containing a glycine [[171]] 170 to valine substitution ~~to its offspring~~.

13. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 4, wherein SEQ ID NO: 4 is expressed, and wherein the transgenic ~~rodent~~ mouse is fertile and passes to its offspring the nucleic acid encoding SEQ ID NO: 4 ~~to its offspring~~.

Claims 14-44. Cancelled

45. (Currently Amended) The transgenic ~~rodent animal~~ mouse of claim 1, wherein the promoter region is selected from the group consisting of CMV, RSV, SV40, EF-1a, histone, TGFβ1, MSX2, c-fos/c-jun, Cbfa1, Fra/Jun, D1x5, osteocalcin, osteopontin, bone sialoprotein, collagenase, alkaline phosphatase, and MGP.

46. (Currently Amended) A transgenic ~~rodent~~ mouse having somatic ~~and/or~~ and germ cells comprising a nucleic acid which comprises a bone-specific promoter region that directs protein expression in ~~rodent~~ mouse cells that is operably linked to a sequence encoding SEQ ID NO: 4 or a mouse homolog of SEQ ID NO: 4 containing a glycine [[171]] 170 to valine substitution, and wherein bone mass is modulated relative to non-transgenic mice in more than one parameter selected from among bone density, bone strength, trabecular number, bone size, and bone tissue connectivity.

47. (Currently Amended) The transgenic ~~rodent~~ mouse of claim 1, wherein the sequence comprises SEQ ID NO: 2; the promoter region is selected from the group consisting of CMV, RSV, SV40, EF-1a, histone, TGFBB1, MSX2, c-fos/c-jun, Cbfa1, Fra/Jun, D1x5, osteocalcin, osteopontin, bone sialoprotein, collagenase, alkaline phosphatase, and MGP, and wherein the transgenic ~~rodent~~ mouse has increased bone density as compared to non-transgenic ~~rodents~~ mice ~~of the same species~~.

48. (Canceled)